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## **EUROPEAN PATENT APPLICATION**

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- (S) Ionically conductive organosiloxane polymer compositions.
- The ionically conductive compositions of this invention comprise the ionic pair (-SO<sub>3</sub>)<sub>n</sub>M<sup>n+</sup> bonded either to a crosslinked polymer containing organosiloxane units or to a finely divided solid that is immobilized within said composition, where the sulfur atom of said ionic pair is bonded by means of a divalent hydrocarbon radical that optionally contains at least one ether (-O-) linkage, and where M is a metal from Group I or Group II of the periodic table of the elements and n represents the valence of M. If the polymer does not contain oxyalkylene units the composition contains a non-aqueous electrolyte.



## EUROPEAN SEARCH REPORT

Application Number EP 93 11 2208

1		DERED TO BE RELEVANT		
Category	Citation of document with i of relevant pa	ndication, where appropriate, sssages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CL5)
A	US-A-4 888 257 (S.C * the whole documen	.NARANG)	1-9	H01B1/12 H01M6/18
A	EP-A-0 362 593 (TORAY SILICONE)  * page 4, line 30 - line 33; claims 1,2 *		1-9	
A,P	POLYMERS FOR ADVANCED TECHNOLOGIES vol. 4, no. 2/3 , 1993 , CHICHESTER, SUSSEX ,GB pages 80 - 84 J.NI & AL 'synthesis of a novel polysiloxane-based polymer electrolyte and its ionic conductivity' * the whole document *		1-9	
A	JOURNAL ELECTROCHEM.SOC. vol. 137, no. 1 , January 1990 , USA pages 29 34 Z.OGUMI & AL 'ionically conductive thin polymer films prepared by plasma polymerization' * the whole document *		1-9	TECHNICAL FIELDS SEARCHED (Int.Cl.5)
<b>A</b>	DATABASE WPI Section Ch, Derwent Publications Ltd., London, GB; Class A85, AN 90-302911 & JP-A-2 215 836 (FUJI PHOTO) 28 March 1990 * abstract *		1,3	H01B H01M
	The present search report has i			
	THE HAGUE	Date of completion of the search 28 February 1994	Des	Examiner
CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another abcument of the same category A: technological background O: non-written disclosure P: intermediate document  A: member of the same patent document A: member of the same patent document				n .

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